

## **Regional HIV/AIDS Epidemiologic Profile of Metro West Health Service Region (HSR), Massachusetts: 2013**

### **Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data**

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2013, this resulted in the removal of 3,529 HIV/AIDS cases, of which 914 have died and 2,615 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

**Table 1. Total number of people reported with HIV infection or AIDS<sup>1</sup> by mortality status on December 31, 2012: Metro West HSR, Massachusetts<sup>2</sup>**

	<b>N</b>	<b>%</b>
People Living with HIV/AIDS	2,628	61%
People Reported with HIV or AIDS who are Deceased	1,694	39%
<b>Total Number of People Reported with HIV Infection or AIDS</b>	<b>4,322</b>	<b>100%</b>

<sup>1</sup> Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

**Table 2. Average annual rate of HIV infection diagnosis from 2009 to 2011 and HIV/AIDS prevalence rate on 12/31/12<sup>1</sup>: Metro West HSR, Massachusetts<sup>2</sup>**

<b>Average annual HIV diagnosis rate from 2009–2011</b>	<b>Average rate per 100,000</b>	<b>Average annual number of HIV diagnoses</b>
Metro West HSR, MA	7.1	108.3
Massachusetts Total	10.3	664.7
<b>HIV/AIDS prevalence rate on 12/31/12</b>	<b>Rate per 100,000</b>	<b>Number of people living with HIV/AIDS</b>
Metro West HSR, MA	172.8	2,628
Massachusetts Total	277.5	18,170

<sup>1</sup> The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

**Table 3. People living with HIV/AIDS<sup>1</sup>, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year<sup>2</sup>: 2002–2011, Metro West HSR, Massachusetts<sup>3</sup>**

<b>Year</b>	<b>HIV/AIDS Prevalence</b>	<b>Deaths among those with HIV/AIDS</b>	<b>Diagnosis of HIV Infection</b>
2002	1,812	35	150
2003	1,908	46	142
2004	1,988	42	122
2005	2,091	34	137
2006	2,149	44	102
2007	2,242	28	121
2008	2,334	25	117
2009	2,420	34	120
2010	2,504	24	108
2011	2,573	28	97

<sup>1</sup> Number of people living with HIV/AIDS on 12/31 of each year

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

**Table 4. People diagnosed with HIV infection from 2009–2011<sup>1</sup> and people living with HIV/AIDS on December 31, 2012 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Metro West HSR, Massachusetts<sup>2</sup>**

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	250	77%	1,886	72%
Female	75	23%	742	28%
Place of Birth:	N	%	N	%
US	177	54%	1,611	61%
Puerto Rico/US Dependency <sup>3</sup>	9	3%	74	3%
Non-US	139	43%	943	36%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	144	44%	1,322	50%
Black (non-Hispanic)	104	32%	907	35%
Hispanic/Latino	61	19%	330	13%
Asian/Pacific Islander	15	5%	60	2%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	153	47%	1,055	40%
Injection Drug Use (IDU)	13	4%	298	11%
MSM/IDU	-- <sup>7</sup>	-- <sup>7</sup>	78	3%
Heterosexual Sex	33	10%	355	14%
Other	-- <sup>7</sup>	-- <sup>7</sup>	67	3%
Total Undetermined	111	34%	775	29%
• Presumed Heterosexual Sex <sup>4</sup>	30	9%	282	11%
• Undetermined <sup>5</sup>	81	25%	493	19%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2012	
Under 13	3	1%	6	<1%
13 to 19	5	2%	18	1%
20 to 24	25	8%	39	1%
25 to 29	42	13%	71	3%
30 to 34	42	13%	149	6%
35 to 39	40	12%	196	7%
40 to 44	51	16%	307	12%
45 to 49	59	18%	515	20%
50 to 54	23	7%	507	19%
55 to 59	14	4%	377	14%
60+	21	6%	443	17%
<b>Total<sup>6</sup></b>	<b>325</b>	<b>100%</b>	<b>2,628</b>	<b>100%</b>

<sup>1</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>2</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>3</sup> Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

<sup>4</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>5</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>6</sup> Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>7</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

**Table 5. People living with HIV/AIDS on December 31, 2012 by gender and race/ethnicity: Metro West HSR, Massachusetts<sup>1</sup>**

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	1,114	59%	208	28%
Black (non-Hispanic)	462	24%	445	60%
Hispanic/Latino	250	13%	80	11%
Asian/Pacific Islander	51	3%	9	1%
<b>Total<sup>2</sup></b>	<b>1,886</b>	<b>100%</b>	<b>742</b>	<b>100%</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

**Table 6. People living with HIV/AIDS on December 31, 2012 by gender and exposure mode: Metro West HSR, Massachusetts<sup>1</sup>**

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	1,055	56%	N/A	N/A
Injection drug use (IDU)	177	9%	121	16%
MSM/IDU	78	4%	N/A	N/A
Heterosexual sex	112	6%	243	33%
Other	41	2%	26	4%
Total Undetermined	423	22%	352	47%
• Presumed heterosexual sex <sup>2</sup>	N/A	N/A	282	38%
• Undetermined <sup>3</sup>	423	22%	70	9%
<b>Total</b>	<b>1,886</b>	<b>100%</b>	<b>742</b>	<b>100%</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>3</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

**Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Metro West HSR, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>**

	Male		Female		Total
	N	%	N	%	
2002	93	62%	57	38%	150
2003	96	68%	46	32%	142
2004	89	73%	33	27%	122
2005	101	74%	36	26%	137
2006	73	72%	29	28%	102
2007	78	64%	43	36%	121
2008	87	74%	30	26%	117
2009	95	79%	25	21%	120
2010	80	74%	28	26%	108
2011	75	77%	22	23%	97

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

**Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Metro West HSR, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>**

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total <sup>3</sup>
	N	%	N	%	N	%	N
2002	64	43%	65	43%	15	10%	150
2003	62	44%	60	42%	19	13%	142
2004	60	49%	42	34%	17	14%	122
2005	68	50%	50	36%	15	11%	137
2006	51	50%	30	29%	17	17%	102
2007	49	40%	52	43%	17	14%	121
2008	53	45%	42	36%	16	14%	117
2009	56	47%	37	31%	20	17%	120
2010	43	40%	32	30%	29	27%	108
2011	45	46%	35	36%	12	12%	97

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

**Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Metro West HSR, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>**

	US		Puerto Rico/ US Dependency <sup>3</sup>		Non-US		Total
	N	%	N	%	N	%	N
2002	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	75	50%	<b>150</b>
2003	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	67	47%	<b>142</b>
2004	70	57%	5	4%	47	39%	<b>122</b>
2005	72	53%	0	0%	65	47%	<b>137</b>
2006	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	42	41%	<b>102</b>
2007	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	50	41%	<b>121</b>
2008	70	60%	5	4%	42	36%	<b>117</b>
2009	59	49%	6	5%	55	46%	<b>120</b>
2010	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	44	41%	<b>108</b>
2011	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	-- <sup>4</sup>	40	41%	<b>97</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

<sup>4</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

**Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Metro West HSR, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>**

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX <sup>3</sup>		Undeter- mined <sup>4</sup>		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2002	40	27%	15	10%	-- <sup>5</sup>	-- <sup>5</sup>	26	17%	-- <sup>5</sup>	-- <sup>5</sup>	31	21%	35	23%	<b>150</b>
2003	45	32%	11	8%	5	4%	21	15%	5	4%	25	18%	30	21%	<b>142</b>
2004	43	35%	11	9%	5	4%	20	16%	0	0%	13	11%	30	25%	<b>122</b>
2005	50	36%	11	8%	-- <sup>5</sup>	-- <sup>5</sup>	17	12%	-- <sup>5</sup>	-- <sup>5</sup>	16	12%	39	28%	<b>137</b>
2006	46	45%	14	14%	-- <sup>5</sup>	-- <sup>5</sup>	14	14%	-- <sup>5</sup>	-- <sup>5</sup>	10	10%	15	15%	<b>102</b>
2007	39	32%	10	8%	-- <sup>5</sup>	-- <sup>5</sup>	15	12%	-- <sup>5</sup>	-- <sup>5</sup>	19	16%	35	29%	<b>121</b>
2008	53	45%	6	5%	-- <sup>5</sup>	-- <sup>5</sup>	11	9%	-- <sup>5</sup>	-- <sup>5</sup>	16	14%	26	22%	<b>117</b>
2009	59	49%	6	5%	5	4%	12	10%	0	0%	12	10%	26	22%	<b>120</b>
2010	50	46%	5	5%	-- <sup>5</sup>	-- <sup>5</sup>	10	9%	-- <sup>5</sup>	-- <sup>5</sup>	12	11%	25	23%	<b>108</b>
2011	44	45%	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>	11	11%	-- <sup>5</sup>	-- <sup>5</sup>	6	6%	30	31%	<b>97</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Includes female sex with male of unknown HIV status or risk. This category is limited to females.

<sup>4</sup> Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

<sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13



**Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Metro West HSR, Massachusetts<sup>1</sup>, 2002–2011<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2002	55	150	37%
2003	52	142	37%
2004	41	122	34%
2005	56	137	41%
2006	39	102	38%
2007	52	121	43%
2008	34	117	29%
2009	37	120	31%
2010	37	108	34%
2011	34	97	35%

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.  
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

**Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Metro West HSR, Massachusetts,<sup>1</sup> 2009–2011<sup>2</sup>**

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
<b>Gender:</b>	<b>N</b>	<b>N</b>	<b>%</b>
Male	89	250	36%
Female	19	75	25%
<b>Race/Ethnicity:</b>	<b>N</b>	<b>N</b>	<b>%</b>
White (non-Hispanic)	56	144	39%
Black (non-Hispanic)	28	104	27%
Hispanic/Latino	19	61	31%
Asian/Pacific Islander	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
Other/Undetermined <sup>3</sup>	-- <sup>5</sup>	-- <sup>5</sup>	-- <sup>5</sup>
<b>Place of Birth:</b>	<b>N</b>	<b>N</b>	<b>%</b>
US	60	177	34%
Puerto Rico/US Dependencies <sup>4</sup>	5	9	56%
Non-US	43	139	31%
<b>Total</b>	<b>108</b>	<b>325</b>	<b>33%</b>

<sup>1</sup> Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

<sup>2</sup> Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

<sup>3</sup> Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

<sup>4</sup> Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

<sup>5</sup> Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13